
Felicia fischeri (Asteraceae) Refound in Northwest Tanzania

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ABSTRACT. *Felicia fischeri* from Tanzania has been treated as a probable synonym of *F. welwitschii* for the last 50 years; the syntypes had been lost. Recent collections from northern Tanzania show that it is a species in its own right.

Key words: Asteraceae, Compositae, *Felicia*, Tanzania.

Hoffmann (1895) described *Felicia fischeri* O. Hoffmann (Compositae: Astereae) from two specimens collected by Fischer in Kagehi, Mwanza District, northern Tanzania, in the early 1880s—the dates are not clear. The syntypes were lost when the Berlin herbarium was bombed in the Second World War. Grau (1973) decided that *F. fischeri* was probably synonymous with *F. welwitschii* (Hiern) J. Grau, a species otherwise known from the far south of Tanzania, southern Congo (Kinshasa), and south to Angola and Zimbabwe. The epithet *welwitschii* is of a slightly later date (1898), but as the types of *F. fischeri* were lost, Grau treated the earlier *F. fischeri* as a doubtful synonym of *F. welwitschii*. In the *Flora of Tropical East Africa* (Beentje, 2002), I agreed with Grau.

Over a century after the original collection, the Tanzanian collectors Festo, Bayona, and Wilbard collected a small Composite in the Minziro Forest Reserve in northwest Tanzania:

TANZANIA. Kagera, Bukoba Rural District, Minziro Forest Reserve, Kakindo Village, SW of forest, altitude 1150 m, rare at forest edge, 01°07'39"S, 31°30'00"E, 1 July 2001, L. Festo, W. Bayona & W. Wilbard 1572 (NHT, K!, MO); Minziro Forest Reserve, Kalagara-Kayunga Subvillage, near top of hill, altitude 1207 m, occasional in open grassland, 01°03'49"S, 31°32'48"E, 20 July 2001, L. Festo, W. Bayona & W. Wilbard 1659 (NHT, K!, MO).

The description of these two plants is as follows:

Herb with annual shoots 40–60 cm high from a perennial root; stem unbranched except for the inflorescence, pale green, pilose to thinly pubescent. Most leaves in a sub-rosette near ground level, oblong, 5–11 × 0.4–0.7 cm, base slightly narrowed, margin entire and minutely ciliate to hispidulous, apex obtuse, with sparse scattered tubercle-based hairs; cauline leaves sparse, similar to basal ones but rapidly decreasing in size. Capitula 30 or more in laxly branched bracteate cymes (the proximal

part of which is probably a leafy branching), radiate; stalks of individual capitula 6–24 mm long, bracteolate, pubescent; involucre campanulate, 3.5–4 mm long, ± 5 mm diam.; phyllaries 2-seriate, lanceolate, green with pale scarious margin and apex, 2.5–3.8 × 0.4–0.6 mm, with a few scattered hairs. Ray florets 1-seriate, 17–19, whitish, tube cylindrical, ± 2 mm long, glabrous, limb ± 3.7 × 1.4 mm, style 2.5 mm long. Disc florets many, tube ca. 2.3 mm long, lobes ca. 0.8 mm long, glabrous. Achenes compressed, brown with 2 paler margins, 1.2–1.3 mm long, pilose; pappus of ± 15 barbellate bristles 2–2.3 mm long.

Hoffmann's original description of *Felicia fischeri* is: "herbacea ramis hispidulis; foliis alternis sparsis linearibus sessilibus obtusis integerrimis hispidis; capitulis parvulis laxe paniculatis pedicellatis; involucris bracteis pauciseriatis subaequilongis oblanceolatis acutis; ligulis oblongis, achaeniis compressis hirtis; pappi seris 1-seriatis tenuibus longe ciliatis.—Untere B. 3 cm long, 2 mm breit.—17 (Kagehi—Fischer n. 371, 336)—Gebirgssteppe."

Hoffmann did not mention the basal rosette, but it is possible that this part was missing from Fischer's specimens; many collectors do not collect the basal parts of Compositae (luckily for us, Festo and his colleagues did!). Otherwise the description, while being rather general, agrees neatly with the recent collections. Kagehi is in Mwanza District, just south of Lake Victoria and not very far from the Minziro Reserve (about 220 km as the crow flies).

The new collections of *Felicia fischeri* differ from *F. welwitschii* sensu stricto in the rosette leaves (*F. welwitschii* has leafy stems with proximal leaves opposite), the phyllaries (2-seriate, not 4-seriate), the number of ray florets (17 to 19, not 25), the smaller disc florets (tube ca. 2.3 mm, not 3.3–4.5 mm long), and the fewer and shorter (2–2.3 mm, not 3–4 mm long) pappus bristles.

I believe these new collections are the taxon that Fischer collected all those years ago, and the recent collections resolve a mystery: *Felicia fischeri* is distinct from *F. welwitschii*, it is a species in its own right, and a rare endemic restricted to northwest

Tanzania and probably the adjacent part of Uganda. I hereby designate the neotype:

Felicia fischeri O. Hoffmann, in Engler, die Pflanzenwelt Ost-Afrikas und der Nachbargebiete C: 407. 1895. TYPE: Tanzania. Mwanza District: Kagehi, *Fischer 336*, *Fischer 371* (syntypes, B destroyed); Tanzania. Bukoba District: Minziro Forest Reserve, Kalagara-Kayunga Subvillage, 01°03'49"S, 31°32'48"E, 20 July 2001, *L. Festo, W. Bayona & W. Wilbard 1659* (neotype, here designated, K). [Duplicates of the neotype are at NHT and MO but have no official status, according to the *Code* (Greuter et al., 2000); nevertheless, I would call them iso-neotypes. It would have been more appropriate if the neotype had been the top specimen, deposited at the National Herbarium of Tanzania, rather than the third set deposited at Kew, but the Kew sheet was the specimen studied.]

The conservation status of *Felicia fischeri* should probably be Data Deficient (DD); the habitat, open grassland, is probably still common, but the species seems to be rare within this habitat. I have no information on threats to the vegetation of this area.

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